At page 15, line 5, replace "mwtL" with --metal--.

At page 20, line 18, replace "radiopharmacueticals" with --radiopharmaceuticals--.

At page 40, line 30, replace "euthanasing" with --euthanizing--.

At page 43, line 2, replace "filed" with --field--.

At page 45, line 13, replace "resuspened" with --resuspended--.

At page 47, line 21, replace "radiotheraprutic" with --radiotherapeutic--.

IN THE CLAIMS

Please cancel claims 9, 11-25, 27, 30, and 32-36 without prejudice.

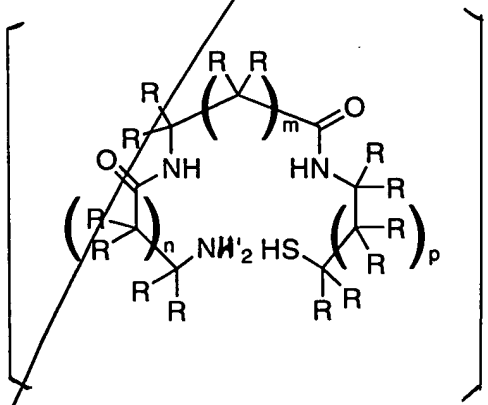
Amend claim 1 to read:

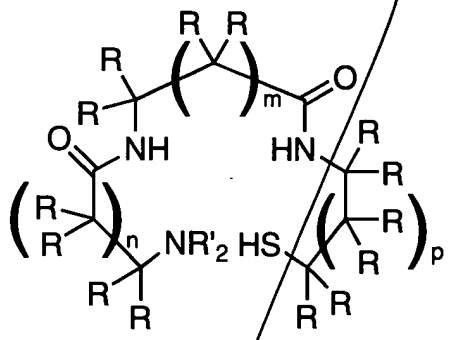
1(amended). A reagent for preparing a radiopharmaceutical agent, the reagent comprising [that is] a monoamine, diamide, thiol-containing metal chelator covalently linked to a targeting moiety.

Amend claim 2 to read:

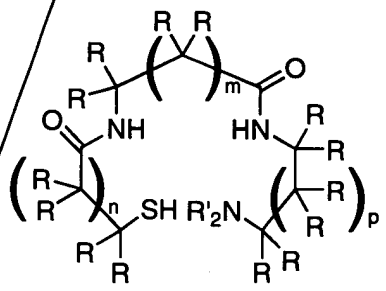
2 (amended). A reagent [of] according to claim 1, wherein the metal chelator [is selected form the group consisting of:

(i) a group having the] has a formula:





[and (ii) a group having the formula:



wherein:

n, m and p are each independently 0 or 1,

each R′ is independently H, lower alkyl, hydroxyalkyl (C_2-C_4), or alkoxyalkyl (C_2-C_4);

each R is independently H or R″, where R″ is substituted or unsubstituted lower alkyl or phenyl not comprising a thiol group;

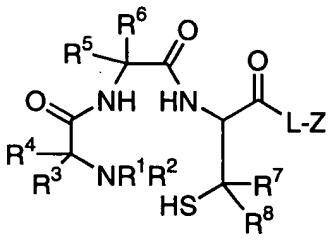
one R or R′ is L, wherein when an R′ is L, -NR'_2 is an amine; and

L is a bivalent linking group linking the chelator to the targeting moiety.

Amend claim 3 to read:

3 (amended). A [composition of] reagent according to claim 2, wherein the metal chelator has [the] a formula:

C2 cont'd



wherein:

R^1 and R^2 are each independently H, lower alkyl, hydroxyalkyl (C_2-C_4) or alkoxyalkyl (C_2-C_4);

R^3, R^4, R^5, and R^6 are independently H, substituted or unsubstituted lower alkyl or phenyl not comprising a thiol group;

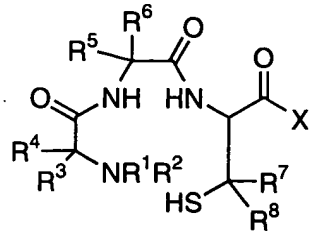
R^7 and R^8 are each independently H, lower alkyl, lower hydroxyalkyl or lower alkoxyalkyl;

L is a bivalent linking moiety; and

Z is a targeting moiety.

Amend claim 4 to read:

4 (amended). A [composition of] reagent according to claim 2, wherein the metal chelator has [the] a formula:



wherein:

R^1 and R^2 are each independently H, lower alkyl, hydroxyalkyl (C_2-C_4), or alkoxyalkyl (C_2-C_4);

R^3, R^4, R^5, and R^6 are independently H, substituted or unsubstituted lower alkyl or phenyl not comprising a thiol group, and one of R^3, R^4, R^5, and R^6 is Z-L-$(CR_2)_n$-, where n is an integer from 1 to 6 and each R is independently H, lower alkyl, or substituted lower alkyl;

R^7 and R^8 are each independently H, lower alkyl, lower hydroxyalkyl or lower alkoxyalkyl;

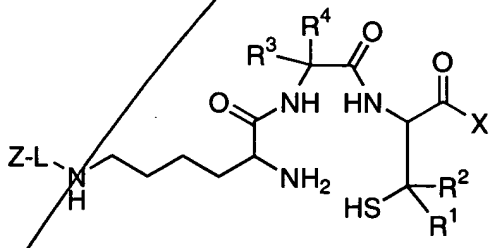
L is a bivalent linking moiety;

Z is a targeting moiety; and

X is $-NH_2$, $-NR^1R^2$, or $-NR^1$-Y, where Y is an amino acid, an amino acid amide, or a peptide of from 2 to about 20 amino acids.

Amend claim 5 to read:

5 (amended). A [composition of] reagent according to claim 4, wherein the metal chelator has [the] a formula:



wherein:

R^1 and R^2 are each independently H, lower alkyl, hydroxyalkyl (C_2-C_4) or alkoxyalkyl (C_2-C_4);

R^3, R^4, R^5, and R^6 are independently H, substituted or unsubstituted lower alkyl or phenyl not comprising a thiol group;

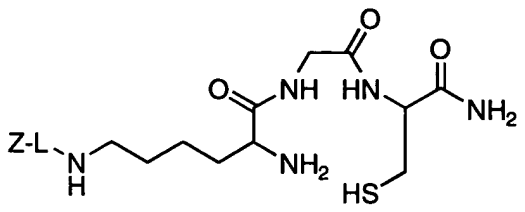
n is an integer from 1 to 6;

L is a bivalent linking moiety; and

Z is a targeting moiety.

Amend claim 6 to read:

6. A [composition of] reagent according to claim 5, wherein the metal chelator has [the] a formula:



wherein:

L is a linker group; and

Z is a targeting moiety.

Amend claim 7 to read:

7 (amended). A [composition of] reagent according to claim 2, wherein the metal chelator is selected from the group consisting of:

(amino acid)^1-(amino acid)^2-cysteine-,

(amino acid)^1-(amino acid)^2-isocysteine-,

(amino acid)^1-(amino acid)^2-homocysteine-,

(amino acid)^1-(amino acid)^2-penicillamine-,

(amino acid)^1-(amino acid)^2-2-mercaptoethylamine-,

(amino acid)^1-(amino acid)^2-2-mercaptopropylamine-,

(amino acid)^1-(amino acid)^2-2-mercapto-2-methylpropylamine-,

(amino acid)^1-(amino acid)^2-3-mercaptopropylamine-,

wherein:

(amino acid) is a primary α- or β-amino acid not comprising a thiol, and wherein the [chelating group] chelator is attached to a targeting moiety *via* a covalent bond with [the] a carboxyl terminus of the [chelating group] chelator or *via* a side chain on one [of the amino acid groups] (amino acid).

Amend claim 8 to read:

8 (amended). A [composition of] reagent according to claim 7, wherein (amino acid)^1 is either a α,ω- or β,ω-diamino acid [wherein the] having a free α-amine or β-amine [is a free amine].

Amend claim 10 to read:

10 (amended). A [composition of] reagent according to claim 2, wherein the chelating group has a formula selected from the group consisting of:

Gly-Gly-Cys-
Arg-Gly-Cys-
-(ε-Lys)-Gly-Cys-
-(δ-Orn)-Gly-Cys-
-(γ-Dab)-Gly-Cys-
and
-(β-Dap)-Gly-Cys-.

Amend claim 26 to read:

26 (amended). A composition of matter comprising a monoamine, diamide, thiol-containing metal chelator.

Amend claim 31 to read: